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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/622,173	08/14/2000	Hartmut Hibst	48770	9890

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EXAMINER

NECKEL, ALEXA DOROSHENK

ART UNIT	PAPER NUMBER
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1764

DATE MAILED: 09/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/622,173

Applicant(s)

HIBST ET AL.

Examiner

Alexa D. Neckel

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 25 June 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) 5-20 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4, 21 and 22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Election/Restrictions***

1. This application contains claims 5-20 drawn to an invention nonelected with traverse in the paper filed July 15, 2004. A complete reply to the final rejection must include cancellation of nonelected claims or other appropriate action (37 CFR 1.144) See MPEP § 821.01.

***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 22 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 22 is rejected because it recites that  $n=100$  when claim 1 has already recited that  $n=10$ . How can  $n$  be two different values when no range has been recited?

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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5. Claims 1-4 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over De Witt et al. (5,714,127).

With respect to claims 1 and 22, De Witt et al. discloses an apparatus which comprises a metallic tube-bundle reactor or heat exchanger (col. 9, lines 1-7) which has parallel through-channels in the form of tubes (11), surrounded by a shell (20) through which a heating or cooling medium can be conducted (via 23) and there are any number of tubes (11) (col. 7, line 65- col. 8, line 3).

Since De Witt et al. discloses that any number of reaction wells / tubes (11) can be in the device as required to perform the desired operation, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have 10, 100, 1000 or 10,000 channels as needed.

It is noted that the material worked on does not limit an apparatus claim, MPEP 2115, therefor the materials (heterogeneous catalyst) within the channels do not further limit the apparatus claim.

With respect to claim 2, it is noted that the material worked on does not limit an apparatus claim, MPEP 2115, therefor the materials (heterogeneous catalyst) within the channels do not further limit the apparatus claim.

With respect to claim 3, De Witt et al. further discloses a tube (11) internal diameter from 1 to 24 mm (col. 8, lines 19-25).

With respect to claim 4, it is noted that the material worked on does not limit an apparatus claim, MPEP 2115, therefor the materials (heterogeneous catalyst) within the channels do not further limit the apparatus claim.

6. Claims 1-4, 212 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Alagy et al. (4,780,196).

With respect to claims 1 and 22, Alagy et al. discloses an apparatus which comprises a metallic tube bundle reactor/heat exchanger (fig. 1, 3 and 4) which has parallel through-channels in the form of tubes (D), surrounded by a shell (see fig. 1 and 3) through which a heating or cooling medium can be conducted (via 2, F and 4) and there are any number of tubes (D)(col. 55, lines 27-29).

Since Alagy et al. discloses that any number of tubes (D) can be in the device as required to perform the desired operation, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have 10, 100, 1000, or 10,000 tubes as needed.

It is noted that the material worked upon does not limit an apparatus claim, MPEP 2115, therefore the materials (heterogeneous catalyst) within the channels do not further limit the apparatus claim.

With respect to claims 2 and 4, it is noted that the material worked upon does not limit an apparatus claim, MPEP 2115, therefore the materials (heterogeneous catalyst) within the channels do not further limit the apparatus claim.

With respect to claim 3, Alagy et al. further discloses wherein the tubes have a diameter of 3.4 to 34 mm (col. 5, lines 30-35).

With respect to claim 21, Alagy et al. further illustrates wherein the tubes (D) run through the body between two orifices situated on the body surface, permitting passage of fluid through the body (see figures 3 and 4).

***Response to Arguments***

Priority

Since the application has been accepted as being filed under 35 USC 371, the requirement of the priority document is withdrawn.

Election/Restriction

The requirement continues to be held final as no special technical feature has been established due to the continued rejection of claims.

35 USC 103

Applicant argues that the catalyst must be given weight in the claims as it is an element of the invention itself.

The examiner respectfully disagrees. Applicant states on page 11 of the response that the instant invention is "designed for the testing of several different catalysts". It would then stand that the catalyst is in fact the material worked upon as it is the material which is to be tested. The rejection is maintained.

***Conclusion***

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not

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mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

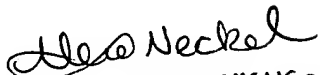
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alexa D. Neckel whose telephone number is 571-272-1446. The examiner can normally be reached on Monday - Thursday from 9:00 AM - 7:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Caldarola can be reached on 571-272-1444. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Alexa D. Neckel  
Examiner  
Art Unit 1764

September 6, 2005

  
ALEXA DOROSHENK NECKEL  
PRIMARY EXAMINER